UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,136	04/17/2006	Frank Leonard Kooi	TNO-12(P66728US00)	5490
7265 7590 11/05/2008 MICHAELSON & ASSOCIATES			EXAMINER	
P.O. BOX 8489		FANG, PAKEE		
RED BANK, NJ 07701-8489			ART UNIT	PAPER NUMBER
			4146	
			MAIL DATE	DELIVERY MODE
			11/05/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
Office Action Comments	10/576,136	KOOI ET AL.					
Office Action Summary	Examiner	Art Unit					
	PAKEE FANG	4146					
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on 17 A	nril 2006						
· <u> </u>							
'=	/ 						
,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠ Claim(s) <u>1-12</u> is/are pending in the application.							
·- · · · · · · · · · · · · · · · · · ·	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-12</u> is/are rejected.	· · · · · · · · · · · · · · · · · · ·						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/o	r election requirement.						
Application Papers							
9) The specification is objected to by the Examine							
10)⊠ The drawing(s) filed on <u>17 April 2008</u> is/are: a)⊡ accepted or b)⊠ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
Attachment(s) 1) \(\overline{\text{N}} \) Notice of References Cited (PTO-892) 2) \(\overline{\text{N}} \) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)						
Information Disclosure Statement(s) (PTO/SB/08) Statement(s) (PTO/SB/08							

DETAILED ACTION

1. Claims 1 - 12 are presented for examination.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the application filed on 04/17/2006.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p) (4) because:

Reference characters "4", "5" and "2" have been used to designate same part on Fig. 1;

Also, reference characters "1" and "2" have both been used to designate same part on Fig. 2;

In addition, reference characters "9" and "10" have both been used to designate same part on Fig. 7j.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes

are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In addition, the drawings further objected for failing to label 1 - 3c as "Prior Art" as disclosed on the specification.

Specification

4. The abstract of the disclosure is objected to because the lack of proper formatting and the abstract needs to be on a separate sheet. Correction is required. See MPEP § 608.01(b).

Claim Objections

5. Claims 1 - 12 are objected to because of the following informalities: there are numerous grammatical, and syntax errors. For example, "the at least part". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 10/576,136 Page 4

Art Unit: 4146

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 6. Claims 1- 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunner et al. (US Pub. 20020093516) in view of Kuroda et al. (US Pub. 20040008156).

Claim 1.

Brunner discloses the following limitations:

A multi-layer display (1) for displaying overlapping images comprising; see at least (Brunner; Fig. 1 -3; Item 103; [0032]) – for "Three layers 103 are provided as input to system 100 for compositing. Output image 204, as may be shown on display 105, contains all three layers 103 overlapping one another."

a first translucent image screen (3), see at least (Fig. 1 -3; Item 103; [0013] & [0029]) – for a first translucent image screen. "...translucent and complex-shaped overlapping layers." & "...each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions..."

Art Unit: 4146

arranged for displaying a first image (8), having a first appearance, e.g., at least one of a color, grey tone and a pattern, see at least (Fig. 2; Item 103; [0029]) – for a first image screen image showing a first appearance of having color, grey tone and a pattern. "each layer 103 contains a plurality of data structures 106-108 for storing color (RGB) values, alpha values, and fade values,"

and wherein the first screen (3) is capable of displaying the first images (8) in one of a transparent state, a normal appearance state and an occluded state; see at least (Fig. 2 - 5; Item 103; [0032 - 0040] & [0084 - 0100]) – for the first screen being capable of displaying an image in a transparent state, a normal appearance state and an occluded state.

a second translucent image screen (4), see at least (Fig. 1 -3; Item 103; [0013] & [0029]) – for a second translucent image screen. "...translucent and complex-shaped overlapping layers." & "...each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions..."

and placed substantially parallel to and overlapping with the first image screen (3), see at least (Fig. 1 -3; Item 103) for being parallel to and overlapping with the first image screen.

arranged for displaying a second image (9), having a second appearance, e.g., at least one of a color, grey tone and a pattern, see at least (Fig. 2; Item 103; [0029]) – for a second image screen image showing a second appearance of having color, grey tone and

Art Unit: 4146

a pattern. "each layer 103 contains a plurality of data structures 106-108 for storing color (RGB) values, alpha values, and fade values,"

wherein the second screen (4) is capable of displaying the second image (9) in one of a transparent state, a normal appearance state and an occluded state; see at least (Fig. 2 - 5; Item 103; [0032 - 0040] & [0084 - 0100]) – for the second screen being capable of displaying an image in a transparent state, a normal appearance state and an occluded state.

characterised in that the first image screen (3) is controllable to alternate at least part of the first image (8) between transparent state and a normal appearance state; see at least (Fig. 2 - 5; Item 103; [0029 – 0033] & [0083 - 0100]) – for a first image screen being controllable to alternate part or all of the first image between the transparent and normal appearance state. "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired." & "...so that arbitrarily-shaped images can be represented as rectangular layers having both transparent and non-transparent ..."

and the second image screen (4) is controllable to synchronously with the first image screen (3) alternate at least part of the second image (8) between an occluded state and a normal appearance state; see at least (Fig. 2 - 5; Item 103; [0029 – 0033] & [0037]) – for a second image screen being controllable to synchronously with the first image change at least part of the second image between the occluded and normal

Art Unit: 4146

appearance state. "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired." & "...the final image portrays layer B as a window that partially obscures a portion of layer A, layer B would be considered "on top" of layer A..."

and wherein the normal appearance state of the first image (8) occurs simultaneously with the occluded state of the second image (9) see at least (Fig. 2 - 5; Item 103; [0029 – 0033] & [0037 - 0039]) – for a normal appearance state of the first image occurs simultaneously with the occluded state of the second image. "...the invention has read all layers 103 that may contribute to pixel 301, or once full opacity has been reached, the value in accumulator 102 is output." [0039]

and the transparent state of the first image (8) occurs simultaneously with the normal appearance state of the second image (9); see at least (Fig. 2 - 5; Item 103; [0029 - 0033] & [0037 - 0039]) – for a transparent state of the first image occurs simultaneously with the normal appearance state of the second image. "...the invention has read all layers 103 that may contribute to pixel 301, or once full opacity has been reached, the value in accumulator 102 is output."[0039]

Brunner discloses a user's observable position "overlapping elements or windows are translucent, so that the user can see underlying elements." [0034] and the first image screen and the second image screen are situated parallel to the display [0029 – 0033] & [0037 - 0039], but fails to disclose a light source and that the light source is parallel to at

least one of the image screens and the viewing axis is perpendicular to the light source. However, Kuroda discloses "a self-emitted light directed toward the viewer is more than that directed away from the viewer." [0030 -0040] which is placed substantially separated along a viewing axis orthogonal to the light source, and the light source is parallel to at least one of the image screens [Fig. 1 – 5]. Since, Brunner and Kuroda inventions are both analogous arts addressing a multi-layer imaging system. Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention to combine the flexible translucent multi-layer display system of Brunner with the light source and the view post of Kuroda to improve the viewing quality and viewing angle of the display for the user.

Claim 2.

wherein the first image screen (3) is controllable, while displaying the first image in the normal appearance state, to occlude at least part of the first image screen (3), the at least part of the first image screen (3) not belonging to the first image (8) in the normal appearance state; see at least (Brunner; Fig. 2 - 5; Item 103; [0029 – 0033] & [0083 - 0100]) – for a first image screen being controllable, while showing the first image in a normal appearance state, to block off at least part of the first image, and at least part of the first image screen not belonging to the first image in the said state; "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired."

Claim 3.

wherein the second image screen (4) is controllable, while displaying the second image in the normal appearance state, to occlude at least part of the second image screen (4), the at least part of the second image screen (4) not belonging to the second image (9) in the normal appearance state. see at least (Brunner; Fig. 2 - 5; Item 103; [0029 – 0033] & [0083 - 0100]) – for a second image screen being controllable, while showing the second image in a normal appearance state, to block off at least part of the second image, and at least part of the second image screen not belonging to the second image in the said state; "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired."

Claim 4.

wherein the first and second image screen (4) are arranged to synchronously with the first image screen (3) alternate only the overlapping part (10) of the first and second images (8, 9), see at least (Brunner; Fig. 2 - 5; Item 103; [0029-0034]) – for a first and second image screen which are arranged to synchronously with the first screen, and change only the overlapping part of the first and second image.

Brunner discloses a user's observable position "overlapping elements or windows are translucent, so that the user can see underlying elements." [0034] and the first image screen and the second image screen are situated parallel to the display [0029 – 0033] & [0037 - 0039], but fails to disclose a light source. However, Kuroda discloses "a self-emitted light directed toward the viewer is more than that directed away from the viewer." [0030 -0040] which is placed substantially separated along a viewing axis

orthogonal to the light source. Since, Brunner and Kuroda inventions are both analogous arts addressing a multi-layer imaging system. Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention to combine the flexible translucent multi-layer display system of Brunner with the light source and the view post of Kuroda to improve the viewing quality and viewing angle of the display for the user.

Claim 5.

further comprising an at least one intermediate image screen (15), placed between the first and the second image screens (3, 4), see at least (Brunner; Fig. 2 - 5; Item 103; [0029-0034]) – for an intermediate image screen placed between the first and the second.

wherein the at least one intermediate image screen (15) is controllable for displaying a third image (16), which overlaps at least in part with the first image (8) on the first image screen (3), and which is overlapped by at least in part by the image on the second image screen (4); see at least (Brunner; Fig. 2 - 5; Item 103; [0029-0034] & [0036-0039]) – for an intermediate image screen is controllable for displaying a third image, which overlaps at least some part with the first image on the first image screen, and which is overlapped by at least some part by the image on the second image screen. "...layers 103 that may contribute to the color value are those layers 103 which contain image data..." [0036] & "...layer 103 is a conceptual representation of the order in which the layers are stacked on one another..." [0037].

Claim 6.

wherein the third image (16) is displayable in an occluded state simultaneously with the first image (8) in a normal appearance state and the second image (8) in an occluded state, see at least (Brunner; Fig. 2 - 5; Item 103; [0029 - 0033] & [0037 - 0039] & [0084 - 0100]) - for a third image is displayable in the occluded state simultaneously with the first image in a normal appearance state and the second image in an occluded state. "...the invention has read all layers 103 that may contribute to pixel 301, or once full opacity has been reached, the value in accumulator 102 is output." [0039] & "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired." [0029] & "...so that arbitrarily-shaped images can be represented as rectangular layers having both transparent and non-transparent ..." [0032]

and wherein the third image (16) is displayable in a normal appearance state simultaneously with the first image (8) in a transparent state and the second image (8) in an occluded state, see at least (Brunner; Fig. 2 - 5; Item 103; [0029 – 0033] & [0037 - 0039] & [0084 – 0100]) – for a third image is displayable in the normal state simultaneously with the first image in a transparent state and the second image in an occluded state. "...the invention has read all layers 103 that may contribute to pixel 301, or once full opacity has been reached, the value in accumulator 102 is output."[0039] & "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired." [0029]

& "...so that arbitrarily-shaped images can be represented as rectangular layers having both transparent and non-transparent ..." [0032]

and wherein the third image (16) is displayable in a transparent state
simultaneously with the first image (8) in a transparent state and the second image (8) in
a normal appearance state, see at least (Brunner; Fig. 2 - 5; Item 103; [0029 – 0033] &
[0037 - 0039] & [0084 – 0100]) – for a third image is displayable in the transparent state
simultaneously with the first image in a transparent state and the second image in a
normal state. "...the invention has read all layers 103 that may contribute to pixel 301, or
once full opacity has been reached, the value in accumulator 102 is output."[0039] &
"...one embodiment, each layer 103 may be of any arbitrary shape and size, and may
contain translucent, transparent, and opaque regions, in any combination desired." [0029]
& "...so that arbitrarily-shaped images can be represented as rectangular layers having
both transparent and non-transparent ..." [0032]

and wherein the simultaneous states of the first, second and third images (8, 9, 16) are alterable synchronously, see at least (Brunner; Fig. 2 - 5; Item 103; [0029 – 0033] & [0037 - 0039] & [0084 – 0100]) – for a simultaneous states of the first, second and third images are changeably synchronous. "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired." [0029] & "...the final image portrays layer B as a window that partially obscures a portion of layer A, layer B would be considered "on top" of layer A..." [0037].

Claim 7.

Brunner discloses the following limitations:

A method for displaying colored images on a multi-layer display (1), see at least (Brunner; Fig. 2 - 5; Item 103; [0013]) - for an "... invention, there is provided a rendering system and method that facilitates efficient compositing of translucent and complex-shaped overlapping layers."

a first translucent image screen (3), see at least (Fig. 1 -3; Item 103; [0013] & [0029]) – for a first translucent image screen. "...translucent and complex-shaped overlapping layers." & "...each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions..."

arranged for displaying a first image (8), having a first appearance, e.g., at least one of a color, grey tone and a pattern, see at least (Fig. 2; Item 103; [0029]) – for a first image screen image showing a first appearance of having color, grey tone and a pattern. "each layer 103 contains a plurality of data structures 106-108 for storing color (RGB) values, alpha values, and fade values,"

and wherein the first screen (3) is capable of displaying the first images (8) in one of a transparent state, a normal appearance state and an occluded state, see at least (Fig. 2 - 5; Item 103; [0032 - 0040] & [0084 - 0100]) – for the first screen being capable of

displaying an image in a transparent state, a normal appearance state and an occluded state.

and a second translucent image screen (4), see at least (Fig. 1 -3; Item 103; [0013] & [0029]) – for a second translucent image screen. "...translucent and complex-shaped overlapping layers." & "...each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions..."

and placed substantially parallel to and overlapping with the first image screen (3), see at least (Fig. 1 -3; Item 103) for being parallel to and overlapping with the first image screen.

arranged for displaying a second image (9), having a second appearance, e.g., at least one of a color, grey tone and a pattern, see at least (Fig. 2; Item 103; [0029]) – for a second image screen image showing a second appearance of having color, grey tone and a pattern. "each layer 103 contains a plurality of data structures 106-108 for storing color (RGB) values, alpha values, and fade values,"

wherein the second screen (4) is capable of displaying the second image (9) in one of a transparent state, a normal appearance state and an occluded state, see at least (Fig. 2 - 5; Item 103; [0032 - 0040] & [0084 - 0100]) – for the second screen being capable of displaying an image in a transparent state, a normal appearance state and an occluded state.

transparent state and a normal appearance state see at least (Fig. 2 - 5; Item 103; [0029 – 0033] & [0083 - 0100]) – for some part or the entire first image between a transparent and a normal appearance state. "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired." & "...so that arbitrarily-shaped images can be represented as rectangular layers having both transparent and non-transparent ..."

and synchronously alternating at least part of the second image (8) between an occluded state and a normal appearance state, see at least (Fig. 2 - 5; Item 103; [0029 – 0033] & [0037]) – for a second image screen being controllable to synchronously with the first image change at least part of the second image between the occluded and normal appearance state. "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired." & "...the final image portrays layer B as a window that partially obscures a portion of layer A, layer B would be considered "on top" of layer A...".

and wherein the normal appearance state of the first image (8) occurs simultaneously with the occluded state of the second image (9), see at least (Fig. 2 - 5; Item 103; [0029 – 0033] & [0037 - 0039]) – for a normal appearance state of the first image occurs simultaneously with the occluded state of the second image. "...the

invention has read all layers 103 that may contribute to pixel 301, or once full opacity has been reached, the value in accumulator 102 is output." [0039].

and the transparent state of the first image (8) occurs simultaneously with the normal appearance state of the second image (9), see at least (Fig. 2 - 5; Item 103; [0029 – 0033] & [0037 - 0039]) – for a transparent state of the first image occurs simultaneously with the normal appearance state of the second image. "...the invention has read all layers 103 that may contribute to pixel 301, or once full opacity has been reached, the value in accumulator 102 is output." [0039].

Brunner discloses a user's observable position "overlapping elements or windows are translucent, so that the user can see underlying elements." [0034] and the first image screen and the second image screen are situated parallel to the display [0029 – 0033] & [0037 - 0039], but fails to disclose a light source and that the light source is parallel to at least one of the image screens and the viewing axis is perpendicular to the light source. However, Kuroda discloses "a self-emitted light directed toward the viewer is more than that directed away from the viewer." [0030 -0040] which is placed substantially separated along a viewing axis orthogonal to the light source, and the light source is parallel to at least one of the image screens [Fig. 1 – 5]. Since, Brunner and Kuroda inventions are both analogous arts addressing a multi-layer imaging system. Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention to combine the flexible translucent multi-layer display system of Brunner with the light source and the

view post of Kuroda to improve the viewing quality and viewing angle of the display for the user.

Claim 8.

occluding at least part of the first image screen (3) not belonging to the first image (8), when the first image (8) is displayed in the normal appearance state. see at least (Brunner; Fig. 2 - 5; Item 103; [0029 – 0033] & [0083 - 0100]) – for at least a first image screen in a normal appearance state, and at least part of the first image screen not belonging to the first image in the said state; "…one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired."

Claim 9.

further comprising: occluding at least part of the second image screen (4) not belonging to the second image (9), when the second image (9) is displayed in the normal appearance state, see at least (Brunner; Fig. 2 - 5; Item 103; [0029 – 0033] & [0083 – 0100]) – for at least a second image screen in a normal appearance state, and at least part of the second image screen not belonging to the second image in the said state; "…one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired."

Claim 10.

further comprising synchronously alternating in the first and second image screen (4) only the overlapping part of the first and second images (8, 9), as viewable from the viewpoint (13), see at least (Brunner; Fig. 2 - 5; Item 103; [0029-0034]) – for synchronously alternating in a first and second image screen only the overlapping part of the first and second image, as viewable from the user's observation. "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired." & "overlapping elements or windows are translucent, so that the user can see underlying elements." [0034].

Claim 11.

further comprising: displaying a third image (16) on an at least one intermediate image screen (15), placed between the first and the second image screens (3, 4), see at least (Brunner; Fig. 2 - 5; Item 103; [0029-0034]) – for an intermediate image screen placed between the first and the second.

whereby the third image (16) overlaps at least in part with the first image (8) on the first image screen (3), and which is overlapped by at least in part by the image (9) on the second image screen (4). see at least (Brunner; Fig. 2 - 5; Item 103; [0029-0034] & [0036-0039]) – for a third image which overlaps at least some part with the first image on the first image screen, and which is overlapped by at least some part by the image on the second image screen. "...layers 103 that may contribute to the color value are those layers 103 which contain image data..." [0036] & "...layer 103 is a conceptual

representation of the order in which the layers are stacked on one another..." [0037].

Claim 12.

further comprising: displaying the third image (16) in an occluded state simultaneously with the first image (8) in a normal appearance state and the second image (8) in an occluded state, see at least (Brunner; Fig. 2 - 5; Item 103; [0029 – 0033] & [0037 - 0039] & [0084 – 0100]) – for a third image is displayable in the occluded state simultaneously with the first image in a normal appearance state and the second image in an occluded state. "...the invention has read all layers 103 that may contribute to pixel 301, or once full opacity has been reached, the value in accumulator 102 is output."[0039] & "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired." [0029] & "...so that arbitrarily-shaped images can be represented as rectangular layers having both transparent and non-transparent ..." [0032]

displaying the third image (16) in a normal appearance state simultaneously with the first image (8) in a transparent state and the second image (8) in an occluded state, see at least (Brunner; Fig. 2 - 5; Item 103; [0029 – 0033] & [0037 - 0039] & [0084 – 0100]) – for a third image is displayable in the normal state simultaneously with the first image in a transparent state and the second image in an occluded state. "...the invention has read all layers 103 that may contribute to pixel 301, or once full opacity has been reached, the value in accumulator 102 is output."[0039] & "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent,

Art Unit: 4146

transparent, and opaque regions, in any combination desired." [0029] & "...so that arbitrarily-shaped images can be represented as rectangular layers having both transparent and non-transparent ..." [0032]

displaying the third image (16) in a transparent state simultaneously with the first image (8) in a transparent state and the second image (8) in a normal appearance state, see at least (Brunner; Fig. 2 - 5; Item 103; [0029 – 0033] & [0037 - 0039] & [0084 – 0100]) – for a third image is displayable in the transparent state simultaneously with the first image in a transparent state and the second image in a normal state. "...the invention has read all layers 103 that may contribute to pixel 301, or once full opacity has been reached, the value in accumulator 102 is output." [0039] & "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired." [0029] & "...so that arbitrarily-shaped images can be represented as rectangular layers having both transparent and non-transparent ..." [0032]

and wherein the simultaneous states of the first, second and third images (8, 9, 16) are alterable synchronously. See at least (Brunner; Fig. 2 - 5; Item 103; [0029 – 0033] & [0037 - 0039] & [0084 – 0100]) – for a simultaneous states of the first, second and third images are changeably synchronous. "...one embodiment, each layer 103 may be of any arbitrary shape and size, and may contain translucent, transparent, and opaque regions, in any combination desired." [0029] & "...the final image portrays layer B as a

window that partially obscures a portion of layer A, layer B would be considered "on top" of layer A..." [0037]

Conclusion

Prior Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prakash et at. (US Pat. 6900802 B2) - The present invention relates in general to image processing, and in particular to identifying relative z-values between segments found in an image and using the relative overlap information in digital image processing.

K. P. Lally (US Pat. 3566391) - Electroluminescent display devices, such as the alpha- numeric type, are formed with a plurality of electrode members separated by a dielectric material arrange in superposed relationship adjacent the surface of at least one side of an electroluminescent member with each electrode member comprising a plurality of discrete electrode elements.

Silverbrook (US Pat. 6020894) - The present invention relates to computer graphics and, in particular, discloses a full colour desk top publishing system capable of creating and printing A3 size true colour images at 400 dots per inch (dpi).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAKEE FANG whose telephone number is (571)270-7219. The examiner can normally be reached on Monday-Friday 9AM-5PM EST.

Application/Control Number: 10/576,136 Page 22

Art Unit: 4146

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patel Ramesh can be reached on (571)272-3688. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PAKEE FANG/ Examiner, Art Unit 4146

/Ramesh B. Patel/ Supervisory Patent Examiner, Art Unit 4146